

# Haskell

Mayank Gupta

28 May 2016

## 1 Project Report

15 May 2016

Member 1 : Mayank Gupta

Work Done : Introduction to haskell

Need and its Advantages

Terminal commands to navigate and open directories

16 May 2016

Member 1 : Mayank Gupta

Work Done : Creating Functions In haskell using Sublime Text editor (baby.hs)

List, List comprehension

Defining and working with Ranges

17 May 2016

Member 1 : Mayank Gupta

Work done : Defining Tuples

Learning Types

Type Variables and Type classes

18 May 2016

Member 1 : Mayank Gupta

Work Done : Syntax in Function

Pattern Matching in Functions

Using Guards and where statements in Function

19 May 2016

Member 1 : Mayank Gupta

Work Done : Let expression in haskell

Case expressions

Starting recursion

20 May 2016

Member 1 : Mayank Gupta

Work Done : Recursion, Base case, Its Need

Practising recursive function from LYAH  
Implementing Quick Sort Recursively

21 May 2016

Member 1 : Mayank Gupta  
Work Done : Curried Functions  
Higher Orderism in order  
Maps and filters  
Lambdas

22 May 2016

Member 2 : Mayank Gupta  
Work Done : Foldl and foldr  
Function application with \$  
Function Composition

23 May 2016

Member 1 : Mayank Gupta  
Work Done : Loading Modules in Haskell  
Data.List Module  
any, and, all functions  
sort, group functions

24 May 2016

Member 1 : Mayank Gupta  
Work Done : Qualified Importing Modules  
Data.Char Module  
Predicates like isControl, isSpace, isAlpha  
ord, chr functions

25 May 2016

Member 1 : Mayank Gupta  
Work Done : Learned Latex  
Started basics of Github

26 May 2016

Member 1 : Mayank Gupta  
Work Done : Data.Map Module  
fromList, insert, map and Filter function  
Creating our own module

27 May 2016

Member 1 : Mayank Gupta  
Work Done : Input Output Functions  
Compiling first Haskell program.(helloworld.hs)  
Difference between I/O and pure functions

28 May 2016  
Member 1 : Mayank Gupta  
Work Done : Files and Stream (continue...)

## 2 Member 2

**Programming Club Documentation** Bhuvan Beejawat **Web Development with Haskell**

WORK TIMELINE		
DATES	TOPICS	RELEVANT INFO GAINED
16 May	Ch. 1 Introduction	Basic Introduction to Haskell
17-18 May	Ch.2 Starting Out	Using Lists and Tuples
19-20 May	Ch.3 Types and Classes	Typeclasses and Type variables
21-23 May	Ch.4 Syntax	Building basic functions with case and let exp.
24 May	Ch.5 Recursion	solving problems with recursions
25-26 May	Ch.6	Using maps, filters and function compositions
27-28 May	Ch.7 Modules	Using Data. and building own modules
29 May	Ch.8 Making Types and Typeclasses	**In progress**

## 3 Member 3 : Abhinav Mishra

29 May 2016 Chapter covered - 9 I have covered 9 chapters of book "learn you a haskell for a great good". I spent first 5 days on learning syntax of haskell by studying initial 4 chapters next 3-4 days I learn modules and higher order programming (chapter 6 and 7 ).in those chapters I learnt about use of map , filter ,fold zip etc..

next 2 days i studied "making of typeclass" and input/output methods and file handling in haskell.

## 4 Future Timeline

30 May - 5 June: Finishing the book LAYH along with 99 problems.

5 June - 20 June: Probability Algorithms, Hashing and cryptography.

20-25 June : Preparing a code for encrypting and also decrypting a text file.